COST OF TENDER Rs. 1000/- ONLY

TENDER NO: IIITDMJ/P&S/2017-18/12

Dated 20/02/18

Fabrication, Supply and Installation of Experimental Setup for Double Sided Incremental Forming

PDPM
INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, DESIGN &
MANUFACTURING, JABALPUR

Dumna Airport Road, Jabalpur - 482005

802 0202018

102/02/18

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INVITATION FOR TENDER

Sealed tenders are invited by Registrar, PDPM Indian Institute of Information Technology, Design & Manufacturing, Jabalpur for Fabrication, Supply and Installation of Experimental Setup for Double Sided Incremental Forming for an IMPRINT-India sponsored project as per specification at Annexure-IV

Tender Reference No.	Enquiry No. IIITDMJ/P&S/2017-18/22				
Date of Pre-bid Meeting	05/03/18 at 04:00 PM				
Last Date and Time for receipt for Tender	14/08/18 till 03:00 PM				
Time and Date for Opening of Technical Bid	14/03/18 at 04:00 PM				
Venue	PDPM IIITDM Jabalpur Campus				

The tender document & and details of turns and conditions can be downloaded from our website www.iiitdmj.ac.in between 20/02/2018 to (4/03/2018

A crossed demand draft of Rs. 1000/- (Rupees One Thousand only) towards Tender Fee (non-refundable) in favor of 'PDPM IIITDM Jabalpur' payable at Jabalpur should be submitted in a separate sealed envelope along with the tenders.

1) Earnest Money Deposit

The earnest money deposit for the above is

Detail of Item	Amount as EMD
Fabrication Supply and installation of experiment of Incremental Sheet Forming	Rs 3,50,000/-

2) Sealing and Marking of Bids

Both the bids (Technical as well as Financial bid) must be separately sealed and marked. The bids shall be marked as following.

- i. EMD and Tender Fee should be sealed in a separate envelope (ENVELOPE-ONE), duly super scribed as EMD and Tender Fee for Tender No.: IIITDMJ/P&S/Enq./2017-18/1/2
- ii. The Technical bid (Part 1) should be sealed in a separate envelope (ENVELOPE-TWO), duly superscribed as Technical Bid (Part 1) for Tender No.: IIITDMJ/P&S/Enq./2017-18/12
- iii. The Financial bid (Part 2) should be sealed in separate envelopes (ENVELOPE-THREE), duly superscribed as Financial Bid (Part 2) for Tender No.: IIITDMJ/P&S/Enq./2017-18/12
- iv. These THREE separate sealed envelopes are to be put in a bigger envelop {ENVELOPE-FOUR), which should also be sealed. Each of these FOUR envelopes MUST be super-scribed with following details

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TENDER FOR FABRICATION, SUPPLY AND INSTALLATION OF EXPERIMENTAL SETUP FOR DOUBLE SIDED INCREMENTAL FORMING

PDPM-IIITDM, JABALPUR

TENDER REF: NO. IIITDMJ/P&S/2017-18/12

Dated: 20/02/18

LAST DATE FOR SUBMISSION:

The Registrar,

PDPM-Indian Institute of Information, Design and Manufacturing,

Dumna Airport Road, Jabalpur-482005

From M	/s:		٠.													
Contact	No												•			
Email ID:	1212101	Silv		27	150	0.5	- 1	-	715	20	42	90		27	20	2

The Financial bids of only those firms will be opened who are found to be technically qualified after evaluation based on the documents & information submitted by the tenderer. The bids submitted without tender fees and/or EMD will be summarily rejected and no further communications in this regard will be entertained. The Institute reserves the right to cancel/reject any or all bids without assigning any reason thereof.

INSTRUCTIONS TO BIDDERS

1. Two / Double Bids

Tenders will have to be submitted in TWO PARTS i.e. (a) Technical Bid and (b) Financial Bid, in two separate properly sealed covers clearly mentioning the type of Bid; on both these covers. The EMD and Tender fee will have to be submitted in a sealed cover. All these three envelopes shall be required to be kept in a bigger envelope which will have the address of the firm submitting the tenders and the officer to whom the tender is addressed.

2. Opening of Bids

Part-1 (Technical Bid) will be opened on the date, time and at the venue mentioned in this tender document. The Technical bids will be opened as per the schedule mentioned, in the presence of such of the tenderers who may wish to be present, either by themselves or through their authorized representatives. On finalization of the Technical Bid, Part-2 (Financial bids) of only those tenderers whose technical bid is found suitable after scrutiny will be opened. The date, time and Venue of opening of the Financial bids will be intimated to all qualified tenderers by fax / e-mail /telephone etc. The Institute reserves the right to accept or reject any bid in part or full without assigning any reason whatsoever. The Institute will not hold any responsibility for postal loss or delay of any bid.

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3. Financial Bid

The proforma of financial bid is given at Annexure III The bidder should enter rates in the bid at the specified place. The quoted rates should be inclusive of all taxes, transportation and installation charges. Rates entered anywhere else will not be entertained and summarily rejected.

4. Eligibility criteria for Technical bid qualification:

- a) The Vendor should be manufacturer/supplier of repute having registered office anywhere in India. In case of authorized dealer of manufacturer, vendor has to submit valid dealership certificate issued by the manufacturer.
- b) In case of manufacturer, the vendor can be either a sole or a consortium of manufacturers. In case of consortium, proper legal document has to be supplied by the vendor.
- c) The average annual turnover of the tenderer during the last three years should not be less than Rs. 100 lakhs (Rupees One Hundred lakhs only) per annum for each year. Audited financial statement certified by CA (FY 2014-15; 2015-16; 2016-17) should be attached.
- d) Vendor should submit a solvency certificate of at least Rs 50 lakhs issued by Bank.
- e) All the pages/documents of the Tender should bear the dated signature (in ink) of the bidder/tenderer with stamp of Firm. Any over-writing corrections & cuttings should bear dated initials of the tenderer. Corrections should be made by writing again instead of shaping or overwriting.
- f) The technical evaluation will be done in following way 'Opening of Technical Bid' and ascertaining of eligibility on the basis of documents/certificates submitted.
- g) Vendor should submit valid registration certificate of his/her unit.
- h) Vendor should submit dealership certificate issued by the manufacturer.
- The bidders are requested to enclose only requisite and relevant data, which has been asked for.
- j) Each and every page of the submitted bid must carry the page numbers.
- k) The bidders are not allowed to make addition and alteration in the tender document. Conditional/ modified tender are liable to be rejected.
- The tender/tenders NOT submitted in the prescribed format or Incomplete in any respect will be out rightly rejected.
- m) If any commercial or price details are found along with Technical bid (Part-I), such bids will be out rightly rejected.
- n) Any offer containing both the, Technical bid (Part-1) and Financial bid (Part-2) in the same envelop will be out rightly rejected.

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- o) The bidder must have successfully completed during last 03 Financial years (FY 2014-15; 2015-16; 2016-17), any one similar order of value Rs. 50 lakhs or any two similar orders of value totaling not less than Rs. 50 lakhs in an institute/ organization of repute. The Work / Purchase Orders and Completion Certificates of such orders are required to be submitted along with technical bid.
- p) GST registration certificate indicating TIN number of the FIRM are required to be submitted along with technical bid.
- q) IT return for the last three years (FY 2014-15; 2015-16; 2016-17) are required to be submitted along with technical bid.
- r) Details and nature of maximum warranty period offered by the vendor are required to be submitted along with technical bid.
- s) Earnest Money Deposit (EMD) in form of Demand Draft/FOR and tender fee for Rs. 1000/- in the form of Demand Draft only is acceptable. EMD of unsuccessful bidders will be refunded after finalization of the tender.
- t) All the documents submitted including tender document should be duly certified by the authorized signatories.
- u) The bidder shall submit one copy of the tender document and addenda thereto, if any, with each page of this document should be signed and stamped to confirm the acceptance of the entire terms & conditions as mentioned in the of the tender enquiry document.
- v) The firm must submit an Undertaking on its letter head that they have not been blacklisted by any State Government/ Central Govt./ PSU Department in India during last 3 years.

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Annexure - I

GENERAL TERMS AND CONDITIONS

- Rates: Rates quoted should be in Indian Rupees (INR) on FOR destination at PDPM-IIITDM, Jabalpur on <u>DOOR Delivery basis</u>, inclusive of all the charges including all taxes, transportation and installation charges, etc.
- 2. Validity: The quoted rates must be valid for a minimum period of 180 days which shall be reckoned from the date of opening for financial bid.
- 3. The Quantity is tentative and Institute reserves the right to change the quantity as per its requirement at any stage.
- 4. In case the tenderer withdraws, modifies or changes his offer during the validity period, bid is liable to be rejected and the earnest money deposit shall be forfeited without assigning any reason thereof. The tenderer should also be ready to extend the validity, if required without changing any terms and conditions etc. of their original tender.

5. Licensing:

- a. All IPRs will be retained by IIITDMJ.
- b. Contracted Firm will have no rights over technology developed in collaboration.
- c. Contracted Firm cannot distribute or Sell any solution which is directly or indirectly based on the technology developed in collaboration.
- 6. The contracted firm has to deliver the final assembled setup under the joint supervision of the contracted firm and the Institute
- 7. Final Design will be prepared, analyzed and verified by IIITDMJ in consultation with the Contracted Firm.
- 8. The control system may be expanded to a 12-axis configuration at later stage the solution provided by tenderer must indicate how this up-gradation can be affected, and quote suitably for the same. The current Experimental Setup is ten axes controlled and expansion to twelve axes will be charged extra as and when required by IIITDMJ.
- 9. The tenderer must incorporate requisite changes in hardware and software as desired by IIITDMJ to enhance the performance of the system. This could involve the hardware changes in component levels as well as software changes in firmware, device drivers, etc. The tender must demonstrate the capability for the same to the technical committee.
- 10. Successful tenderer must supply the following to IIITDMJ as part of their delivery:
 - a. Controller: Schematics and BOM
 - Machine Design Drawings and Documents:
 Parts, assemblies, bought out BOMs, Production Process Sheets and assembly instructions

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11. Warranty: Warranty should be at least 02 years from the date of installation of the complete setup. During warranty period the purchaser will not bear the cost of the item(s), which may come as replacement of the original stores or spares as a result of faults noticed at the time of inspection during the warranty period. The Seller/Manufacturer is required to eliminate the fault(s) occurring during the Warranty period without delay by improvement or replacement as may be necessary, at their own cost. During warrantee period, the supplier should ensure a maximum downtown of 72 hours from the date and time of the complaint lodge about the item. The supplier must provide after sales service facility on site during warrantee period.

All charges with regard to supply of spare parts, labor, travel, per diem and accommodation to supplier's staff, etc. shall be borne by the supplier during the period of warranty. The Institute shall not pay any additional charges for services rendered during the warranty period.

- 12. Inspection & Testing: Setup will be inspected by the purchaser at his end. Machine Parts /Components rejected on inspection will be replaced by the supplier free of cost and all charges for collection and delivery of the same to the Purchaser will be on Supplier's account. The trial pieces /components will be supplied IIITDMJ free of cost and any rejection will not be chargeable.
- 13. Contract: The technically qualified vendor who is awarded the order will have to give acceptance within 10 days on receipt of such communication. Further, an agreement having terms and conditions laid down in tender documents will required to be signed on prescribed format within 10 days of acceptance of such order,

14. Defect Liability clause:

- a. In case of any loss, breakage / damage and manufacturing defects are detected in the experimental setup / supplied material, it shall be replaced / repaired by the manufacturer/supplier free of cost and without any charges whatsoever.
- b. The supplier will remain responsible for any defect arising out of defective or improper materials or workmanship in the work for a period of two years from the date of installation and they shall be bound to carry out the necessary repairs / rectifications at their own cost or in case of failure to do so, the Institute may carry out the same by other alternative agency and deduct the expense from any sum that may be due, and any time, thereafter, may become due to the supplier or from security deposit lying with the Institute.

15. Enhancement in Rates:

The tender rates shall remain valid applicable during the whole execution period and the supplier shall not be entitled to any price variation or escalation.

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16. Delivery:

Unless otherwise stated delivery, installation and commissioning of Experimental setup for Incremental sheet forming at PDPM-IIITDM, Jabalpur will have to be completed within 10 months from the stipulated date of start mentioned in the purchase order.

- 17. Printed conditions of the firm sent along with the tender, if any, shall not be binding on PDPM IIITDMJ.
- **18. Late and delayed submission of tenders:** Late and delayed tender will not be considered. If, in any case, unscheduled holiday occurs on prescribed closing/opening date, the next working day shall be the prescribed date of closing/opening.
- 19. Conditional bids will be summarily rejected.

20. Terms of Payment:

- a. Payment will be made
 - i. 20% against DAP (Design Approval Prints) approval.
 - ii. 20% after Bought out Parts procurement & machine parts availability and inspection by IIITDM.
 - iii. 40% + 100% taxes against proforma invoice and after IIITDM inspection and dispatch clearance of machine at manufacturer's site.
 - iv. 20% after successful commissioning at our works
- b. The Performance Bank Guarantee (PBG) in the form of Demand Draft/FOR from any Nationalized Bank including SBI shall have to be submitted within 21 days from the date of issue of Purchase Order. The value of PBG shall be 10% of the value of Purchase Order and this PBG has to be valid up to 60 days beyond all contractual/obligations including the warranty period.
- 21. All legal disputes shall be subjected to jurisdiction of Jabalpur courts only.
- 22. Penalty for delayed Delivery: In the event of delayed delivery, Installation & Commissioning, i.e., after the expiry of the period as mentioned in P.O., the vendor shall be liable for a penalty deduction at a rate 1.5% per month of delay to be computed on per day basis. The maximum levy of compensation shall be 10% of the contract value.
- 23. Incomplete Tender: Bidders are required to submit all relevant documents as per the checklist along with technical bid. Failing which their bid will be summarily rejected.

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IMPORTANT

- Director of PDPM-IIITDM, Jabalpur reserves the right to accept or reject any tender in part or full without assigning any reason and does not bind himself/herself to accept the lowest bid. The Institute at its discretion may change the quantity/ upgrade the criteria/ drop any item or part thereof at any time before pacing the Purchase Order.
- 2. In case of any disputes, the decision of the Director of this Institute shall be final and binding on the Bidders.
- 3. Any other term/rule/clause not specifically mentioned here, GFR shall be referred.
- 4. In case the date of opening of technical bid is holiday, the bids will be opened on the next working day.

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ANNEXURE-II

CHECKLIST OF DOCUMENTS SUBMITTED

S.No	Documents to be submitted	Complied	Non	Remarks
			Complied	
1	Copy of Registration of firm			
2	Tender Fee			
3	EMD details			
Technical details of the quoted items viz. make/model, detailed dimensions, material, paint etc. (enclose leafiest for the product quoted)				
5	Warranty declaration			
6	Numbering and signature on all pages of tender documents and attached documents			
7	Copy of Income Tax Return for last 3 years (FY 2014-15;2015-6;2016-17)		*	<u>1</u>
8	Solvency certificate of at least Rs. 50 lakhs issued by any Bank in the name of the tenderer			
9	Proof of Experience for the last 03 years			
10	Completion certificate for the above similar orders			
11	GST registration			
12	Blacklist undertaking			
13	Last 03 years audited financial statement from Chartered Accountant showing average annual turnover for last 03 years, not less than Rs.100 lakhs for each year. (FY 2014-15;2015-16;2016-17)			
14	A signed copy of tender document and addenda thereto if any to establish that all the terms and condition are acceptable			
15	Have all the pages in the tender documents numbered.			

(Signature of Tenderer with Seal)

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ANNEXURE-III

FINANCIAL BID

SI No.	Items	Quantity	Rate inclusive of all taxes, freight and installation	Total Cost
1	Fabrication, Supply and Installation of Experimental Setup for Double Sided Incremental Forming	01 Nos		
2	GST			

(Signature of Tenderer with seal)

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	ANNEXURE IV	£					
	DESCRIPTION	VALUES/SPECIFICATION					
CAPACITY	MAX. SHEET/JOB THICKNESS	5 mm					
(Factory Acceptance	MATERIAL OF SHEET/JOB	Al/Cu/EDDS/DDS/MS/SS/Ti					
Test (FAT) will be for force/load only)	MAXIMUM LOADING CAPACITY OF FRAME	2500 kg					
MACHINE ORIENTATION	VERTICAL / HORIZONTAL MACHINE						
TRAVEL HEAD 1 (at	X-AXIS (min.)	750 mm					
top for vertical or	Y-AXIS (min.)	750 mm					
Left/Right for horizontal architecture)	Z-AXIS (min.)	350 mm					
	X-AXIS (min.)	750 mm					
TRAVEL HEAD 2 (at bottom for vertical or	Y-AXIS (min.)	750 mm					
Right/Left for horizontal	Z-AXIS (min.)	350 mm					
architecture)	TWO ROTARY AXIS (Preferably 'a' and 'b' on Spindle)	MINIMUM Range: -45 deg. to +45 deg.					
AXIS LOAD RATING	TRAVEL Head 1 & 2 (all axes)	MINIMUM 2500 kg					
RAPID TRAVERSE	TRAVEL Head 1 & 2 (all axes)	4000 mm/minute (min.)					
FEED	TRAVEL Head 1 & 2 (all axes)	1000 mm/minute (min.)					
POSITIONAL ACCURACY	TRAVEL Head 1 & 2 (all axes)	± 20 microns					
POSITIONAL REPEATABILITY	TRAVEL Head 1 & 2 (all axes)	± 5 microns					
TABLE	SIZE	900 mm x 900 mm					
	T- SLOTS	22 x 15 to suit M-12 T Bolts					
	MAX. LOADING CAPACITY (over axial load)	Additional static Load of 250 kg (Fixtures, clamping, etc.)					
TOOL	MAX. TOOL DIAMETER	30 mm					
	NO. OF HEADS	02 (matched pair of bearings, 2+2 design)					
	SPINDLE TAPER	BT 40					
	SPINDLE SPEED	0-2000 RPM					
	SPINDLE MOTOR POWER	3 kW					
SPINDLE (with suitable design to take thrust load of 2500 Kg)	SPINDLE RUNOUT	AS PER DIN STANDARDS (2-3 microns)					
	ENCODER	1024 PPR ROTORY ENCODER OR BETTER					
8/	OTHERS	HIGH RIGIDITY, SUITABLE DRIVE WITH POSITION CONTROL, DIRECT DRIVE (without belt), SHOULD ALSO SUPPORT ORIENTATION CONTROL					

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S BASES LL SCREWS GUIDES	FRAME TO ENSURE MACHINE RIGIDITY CASTED HEAVY DUTY DESIGN WITH MINIMUM 50 mm DIAMETER, HIGH PRECISION GROUND PRELOADED BALL SCREWS (Make: THK/HIWIN/PMI) HEAVY DUTY DESIGN P CLASS LM GUIDES WITH MINIMUM 45 mm HEAVY DUTY LM GUIDES (Make: THK/HIWIN/PMI) HEAVY DUTY MOTOR BRACKETS FOR X, Y AND Z AXES SERVOFLEX COUPLINGS DRAGCHAINS FOR CABLES LIMIT SWITCHES FOR PROTECTION SENSORS FOR OVERTRAVEL AND HOME POSITION INDICATION TOTAL 12 AXIS CONTROL
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	& TOTAL 12 AXIS
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BASED CNC CONTROLLER CARDS	2 FOR ROLL AND PITCH
	2 FOR SPINDLE (A & B)
	ADDITIONAL 2 AXIS FOR
	FUTURE APPLICATIONS
	MINIMUM 16 DIGITAL INPUTS AND 16 DIGITAL
	OUTPUTS
	LINEAR AND CIRCULAR
	INTERPOLATION
	WINDOWS AND LINUX BASED DRIVER LIBRARY
	FOR MOVING EACH AXIS
NTROLLER LIBRARY	C LIBRARY, PYTHON API
	FOR G/M CODE SUPPORT
	SOURCE CODES/ SAMPLE MOTION PROGRAMS
	ADDITIONAL ANALOG
	INPUTS TO SUIT SENSOR DATA ACQUISITION – 0-10
	VOLTS, 16 BIT
	RESOLUTION, MIN 100
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	NTROLLER LIBRARY

	kHz SAMPLING FREQUENCY, TOTAL 12 NOS. FULLY WIRED POWDER COATED PANEL SPACE FOR 2 ADDITIONAL AXIS MOTORS CONTROLLER EXTENDABLE TO 12 AXIS CONNECTORS FOR MOTOR CONNECTIONS SHIELDED CABLES FOR MOTORS, ENCODERS AND CONTROL SHOULD HOUSE: • THE DRIVE AMPLIFIERS
	 24/12 VOLT POWER SUPPLIES POWER FILTERS DIGITAL IO SIGNAL CONDITIONERS CONTACTORS MCBS, ETC.
MISCELLENIOUS	SPRAY PAINTED FRAME MOC: MS WITH PLATING
ULTRASONIC ASSISTED FORMING SETUP	THE MACHINE SHOULD HAVE CAPABILITY TO ACCOMMODATE ULTRASONIC ASSISTED FORMING SETUP WHEN REQUIRED
ADDITIONAL ULTRASONIC SPINDLE	POWER: MIN. 2KW

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